

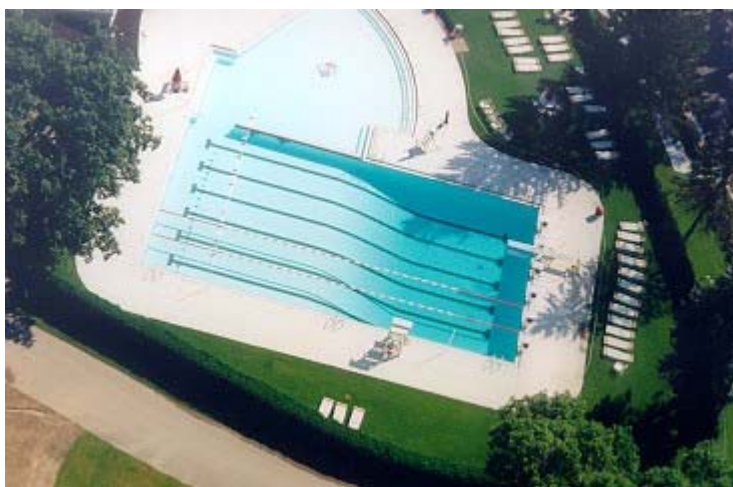
**ENVIRONMENTAL SERVICES
DEPARTMENT**
Albert F. Brown, Director
1001 N. Central Avenue , Suite 350
Phoenix, AZ 85004 - 1937



**ENVIRONMENTAL HEALTH SERVICES
DIVISION**
David F. Ludwig., Manager
Telephone (602) 506-4847
Fax (602) 506-6862 Teletype (602) 506-6704
(For hearing/speech impaired)

Application Packet for Approval to Construct a Public or Semi-Public Swimming Pool

Revised: November 12, 2002



CONTENTS:

FEE AND CODE INFORMATION

APPLICATION FOR APPROVAL TO CONSTRUCT

INSPECTION CHECKLIST

VARIANCE APPLICATION

CONSTRUCTION CERTIFICATION LETTER

HYDRAULICS INFO SHEET

CONTACT INFORMATION:

CHRIS BAUGH, ENVIRONMENTAL ENGINEER

COMMERCIAL SWIMMING POOL CONSTRUCTION PROGRAM

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A. All applications **MUST** contain the following information:

1. POOL NAME : Name of establishment and street address must read the same as was submitted for construction review / or as permit reads.
2. APPLICANT NAME : Print name of owner/ or authorized agent (letter of authorization must be submitted if signed by agent).

B. Construction Certification letter **must be sent and be dated after** Final Inspection requested.

C.. Additionally, for Variance Request **BE SPECIFIC** as to what is being requested (Fee of \$200 and one application per request). Submit all explanatory paragraphs, pertinent material, exhibits, photographs, any material necessary to inform one as to the reason for your request. **(12 separate packets of each is required. (Each set must include an application, an adequate description of the variance required, a copy of the variance area plans and/or additional material together).** If this is a new pool appropriate construction plans, cut sheets and fees must be included as well.

1. The Swimming Pool Variance hearings are scheduled to be heard every second Tuesday of the month when properly filed with the Division. All hearings shall be open and public. (see attached scheduled hearing dates)
2. The Manager of the Environmental Health Division shall serve as the Director's representative at all meetings and furnish secretarial services for this Committee.
3. The Health Officer shall render a final decision within 10 days of receiving the Committee recommendations.
4. If the applicant/petitioner for the variance request is dissatisfied with the decision of the Director, the applicant/petitioner may appeal to the Board of Health. Such appeals shall be presented to the Secretary of the Board of Health in writing, within thirty (30) days after the filing of the decision of the Director.

NOTICE: Each request **must** be accompanied by a fee of \$200. (per variance request) made payable to M.C.E.S.D.

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REQUEST FOR VARIANCE FOR CONSTRUCTION OF A PUBLIC OR SEMI-PUBLIC SWIMMING POOL OR SPA

Has the applicant submitted plans and a request for approval to construct a swimming pool to the Maricopa County Environmental Services Department for review? ☐ Yes ☐ No

This Pool/Spa is: ☐ New ☐ Existing

The undersigned requests a variance from the requirements of the Maricopa County Environmental Health Code Chapter VI applicable to the design, construction and operation of bathing places – public and semipublic swimming pools. It is understood that a variance can be granted only when Chapter VI of the Maricopa County Environmental Health Code is more restrictive than Administrative Rules and Regulations of the State of Arizona 9-8.

Pool Name: _____

Location Address: _____

City: _____ Zip: _____

Phone #: (____) _____ FAX #: (____) _____

Owner Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone #: (____) _____ FAX #: (____) _____

Applicant Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone #: (____) _____ FAX #: (____) _____

Specify request and justification (attached additional sheets if necessary): _____

TRUE OWNER'S SIGNATURE: _____ DATE: _____

TYPE OR PRINT NAME: _____ TITLE: _____

- An attached letter of authorization to sign is required for any person signing this instrument other than the legal owner of the property. There is a fee of \$200 to be submitted with each variance
- **Submit 12 sets including in each completed copies of the application, plans and any related material.** Attach plan of proposed facility clearly delineating area where variance is requested.

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FEES FOR PLANS EXAMINATION, INSPECTIONS AND PERMITS

Initial Fees are necessary to begin Plans Examination and Inspections. The initial fees for Swimming Pool and Spa Plan Reviews and Inspections are:

Size (ft²)	Initial Fee	Max Fee	Expedited* Initial Fee	Expedited* Max Fee
<1000	\$200	\$840	\$400	\$1680
1001 –2000	\$680	\$2040	\$1360	\$4080
2001 – 9999	\$795	\$2385	\$1590	\$4770
>10,000	\$1050	\$3165	\$2100	\$6330
Variance	\$200 per Variance			

* - Plans submitted for Expedited Review requires prior approval.

If the actual cost exceeds the initial fee, the Department will bill the Applicant for the difference between the actual cost and the initial fee. Actual costs are based on \$70/hr. Such a difference shall be paid in full prior to issuance of a Permit.

In addition to the above fees, an annual permit fee of \$150 per Spa or Wading Pool and \$200 per Swimming Pool is charged. This fee covers regular annual inspection(s).

REGULATORY AUTHORITY

The Maricopa County Environmental Services Department (MCESD) regulates Public and Semipublic Pools and Spas under Delegation Agreements with the Arizona Department of Environmental Quality (ADEQ) and the Arizona Department of Health Services (ADHS) as authorized by the ARIZONA REVISED STATUTES (ARS) 49-107: Local delegation of state authority. The Delegation Agreements between the county (MCESD) and the state simply authorizes the county to regulate Public and Semipublic Pools and Spas using the State's regulations in addition to the county's own regulations (the Maricopa County Environmental Health Code (MCEHC)). However, any changes or comments concerning the state regulations should be addressed to the state (ADEQ, ADHS) as only those departments can effect changes to the state regulations which they promulgate and administer. The two State Arizona Administrative Codes (AAC) administered by MCESD are: R18-5-200 (ADEQ) and R9-8-800 (ADHS).

In addition to regulating Public and Semipublic Pools and Spas by administering State of Arizona rules and regulations, MCESD also regulates Public and Semipublic Pools and Spas by administering the **MARICOPA COUNTY ENVIRONMENTAL HEALTH CODE (MCEHC): Chapter VI; Bathing Places – Public and Semi-Public Swimming Pools** as authorized by ARS 49-112: County regulation; standards. This means that MCESD has established within the MCEHC additional rules and regulations for Public and Semipublic Pools and Spas. The main advantage of Maricopa County having its own rules is that it allows the county the flexibility to modify the rules to meet the ever-changing needs of the swimming pool industry. Maricopa County has updated its rules numerous times to meet the changing needs of the swimming pool industry.

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**APPLICATION FOR APPROVAL TO CONSTRUCT A PUBLIC OR SEMI-PUBLIC
SWIMMING POOL OR SPA**

A: Check One ☐ Semi-Public ☐ Public ☐ Variance

B: (Check all that apply) ☐ Non-Diving ☐ Main ☐ Wader
☐ Diving ☐ Therapy ☐ Special Use

FACILITY, OWNER AND CONTRACTOR/ENGINEER/ARCHITECT INFORMATION

1. To Serve (Facility Name and type): _____
2. Facility Contact Name: _____ Phone #: (____) _____
3. Street Address: _____ City: _____ Zip: _____
4. OWNERSHIP Name: _____ Phone #: (____) _____
5. Authorized Agent's Name: _____ Title: _____
6. Address: _____ FAX #: (____) _____
7. City: _____ State: _____ Zip: _____
8. POOL DESIGNER'S Name: _____ Phone #: (____) _____
9. POOL Contractor/Engineer/Architect's Name: _____
10. AZ Registration/License # (Cont: A-9,19, KA-5,6): _____ Phone #: (____) _____
11. Address: _____ FAX #: (____) _____
12. City: _____ State: _____ Zip: _____

DESIGN DATA

13. Perimeter (ft): _____ Area (ft²): _____ Avg. Width (ft): _____ Avg. Length (ft): _____
14. Volume (gal): _____ Turnover Time Required (hours): _____ Turnover Rate Required (gpm): _____
15. Structure: Gunite ☐ Poured Concrete ☐ Fiberglass ☐ Plastic ☐ Other ☐
16. Fully Describe Finish (Plaster, PebbleTec, Color, etc.): _____
17. Skimmers (qty): ____ Make/Model: _____ Flow Required (# skimmers X 27 gpm): _____
18. Returns/Inlets (qty): ____ Wall: _____ Floor: _____
19. Surge Tank Capacity (For Gutter or Rim Flow Systems Only): _____ gallons
20. Filter Type: Sand ☐ D.E. ☐ Cartridge ☐
(20 gpm/ ft² max flow) (2 gpm/ ft² max flow) (0.375gpm/ ft² max flow)
21. Manufacturer: _____ Model #: _____

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DESIGN DATA (CONTINUED)

22. Filter Flow Capacity: 1) _____ X _____ X _____ = _____
(Lowest of #1 # of Filters size (ft²) max flow (gpm/ ft²) maximum filter capacity (gpm)
or #2 Governs) 2) _____ From Manufacturer's Specifications (NSF Listed Rating)
(max gpm)
23. Chlorinator Make/Model: _____ Erosion ☐ Liquid ☐ Gas ☐
24. Pump Make/Model: _____ # _____ Horsepower: _____
25. Distance From Main Drain: _____ (ft) TDH: _____ (ft) Flow: _____ (gpm) Turnover: _____ (hr)
26. Waste Discharged to: Sewer ☐ (Requires 2X Pipe Diameter Air Gap) Irrigation ☐ Wet Well ☐
27. Cleaning Equipment: Manual ☐ Automatic ☐ Make/Model: _____
28. Vacuum System: Portable ☐ Internal ☐
29. Auto Fill Line: Surface ☐ Submerged ☐ Backflow Protection Method: _____
30. Do all Doors/Gates swing AWAY from the pool/spa area? NO ☐ YES ☐
31. Are there any windows in the pool enclosure or planters/water features within 4' of pool/spa? NO ☐ YES ☐
32. If answer is YES to the above question, are detailed plans for each attached? NO ☐ YES ☐
33. Walkways - Minimum Width: _____ (ft) Finish Type: _____
34. Safety Equipment: Ring Buoy with 50 ft Line ☐ Shepherd's Crook with 16ft Pole ☐
35. Depth Markers: _____ ft _____ ft _____ ft _____ ft _____ ft _____ ft _____ ft _____ ft _____ ft _____ ft

SIGNATURES

By signing below, the Engineer, Architect or Contractor certifies that they are familiar with all State and County Code requirements applicable to this project and that this bathing place will be constructed and operated in accordance with the Maricopa County Environmental Health Code governing design, construction and operation of public and semi-public bathing places. An attached letter of authorization to sign is required for any person signing this instrument other than the legal owner of the property By signing below as Owner, certification is made that the signor is an authorized agent for the true ownership, and that the ownership information above is correct.

36. Architect, Engineer or Contractor's Signature: _____
37. Printed Name: _____ Date: _____
38. Pool Owner's Signature: _____ Title: _____
39. Printed Name: _____ Date: _____

Three legible copies each of the application, plans and additional specifications or calculations must be submitted. One original copy of manufacturers specifications / cut sheets on each piece of equipment is required. Signatures must be original on one application and **ALL PLANS MUST HAVE ARCHITECT/ENGINEER/CONTRACTOR OF RECORD'S ORIGINAL SIGNATURE AND DATE.** Revised plans and applications must have the revision date, the word "REVISED" and an original signature for the Contractor/Architect/Engineer. Certification that the pool is constructed in accordance with approved plans and specifications must be submitted after final inspection is approved and before the permit to operate the pool for use is issued. Permit will NOT be issued for operation of uncertified pools.

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SWIMMING POOL CONSTRUCTION PROGRAM – OPERATIONAL INSPECTION FORM

THIS POOL AND/OR SPA HAS FAILED TO QUALIFY FOR A PERMIT TO OPERATE AND CANNOT BE USED

IF THE CONTRACTOR DOES NOT RESPOND TO THIS NOTICE, A RE-INSPECTION WILL BE CONDUCTED IN TEN DAYS. FAILURE TO MAKE CORRECTIONS MAY RESULT IN THE POOL BEING POSTED CLOSED.

PROJECT NAME: _____ MCESD #: _____
CONTRACTOR: _____ FAX #: () _____
OWNER: _____ FAX #: () _____

DEFICIENCIES TO BE CORRECTED

- ☐ **EQUIPMENT INSTALLED NOT THE SAME AS APPROVED ON APPLICATION/PLANS**
☐ PUMP UNIT INSTALLED: _____ UNIT APPROVED: _____
☐ FILTER UNIT INSTALLED: _____ UNIT APPROVED: _____
☐ CHLORINATOR UNIT INSTALLED: _____ UNIT APPROVED: _____
- ☐ **INSTALL PROPER GAUGES/VALVES/FLOW INDICATORS**
☐ VACUUM GAUGE ON PUMP SUCTION ☐ AIR RELIEF VALVE ON FILTER
☐ FLOW INDICATOR IN PUMP DISCHARGE LINE ☐ SIGHT GLASS ON BACKWASH LINE
☐ FLOW INDICATOR IN CHLORINATOR LINE
☐ PRESSURE GAUGE ON FILTER INFLUENT MANIFOLD AND FILTER EFFLUENT (PRECEEDING HEATER)
- ☐ **PROVIDE REQUIRED SAFETY EQUIPMENT, VISIBLE, MOUNTED, EASY TO ACCESS AND USE**
☐ RING BUOY WITH 50' ROPE ATTACHED ☐ SHEPHERD'S CROOK ON 16' RIGID POLE
☐ DEPTH MARKERS ON TILE LINE AND DECK ☐ TIGHTEN HANDRAILS/DIVING BOARDS ETC.
☐ INSTALL DARK CONTRASTING TILE ON EDGE OF BENCH & STEPS
☐ SIGNS: NO DIVING, POOL RULES, BATHER LOAD, NO DIVING DECK MARKERS
☐ EMERGENCY SHUT-OFF SWITCHES / 15 MINUTE MAXIMUM SPA TIMER
- ☐ **FENCING/BARRIER REQ'D AROUND ENTIRE POOL & NOT IN COMMON WITH ANY RESIDENCE**
- ☐ **INGRESS/EGRESS NOT CONSTRUCTED PER CODE & APPROVED PLANS**
☐ GATES MUST BE SELF CLOSING/SELF LATCHING ☐ LATCHES MUST BE 54" ABOVE FLOOR
☐ ENCLOSE EQUIPMENT WITHIN TAMPERPROOF FENCING/BARRIER
☐ DOORS/GATES MUST SWING/OPEN AWAY FROM POOL; NO WINDOWS TO RESIDENCES
- ☐ **ADJUST WATER CHEMISTRY**
☐ PROVIDE ON-SITE DPD TEST KIT ☐ PLACE CHEMICALS IN FEEDERS
☐ ADJUST pH TO 7-8 RANGE; ADJUST FREE CHLORINE TO 1-3 PPM POOL, 3-5 PPM SPA
- ☐ **PREVENT CROSS CONNECTION**
☐ INSTALL PRESSURE VACUUM BREAKER ON FILL LINE; BACKFLOW PREVENTERS ON ALL HOSE BIBS
☐ PROVIDE MINIMUM 2X PIPE DIAMETER AIR GAP ON BACKWASH LINE INTO SEWER
- ☐ **OTHER:** _____

INSPECTOR'S SIGNATURE

NAME

PHONE #

DATE

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CONSTRUCTION CERTIFICATION LETTER

NOTE: ONLY ORIGINAL FORMS ACCEPTED - NO PRE-DATED, FAX OR COPIES ACCEPTED

Re: Serving: _____ (ie: Holiday Inn; Bellview Apts.; etc.)
Pool name: _____ (ie: Main, Clubhouse #2, etc.)
Address: _____ Phone: (_____) _____
City: _____ Zip: _____
Contact Name: _____ Title: _____

Owner of Record to whom Operating Permit is to be issued: (**CANNOT BE CONTRACTOR**)

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Contact Name: _____ Phone: (_____) _____

As required in chapter VI, Section 1, Regulation 2i, I certify that the above referenced bathing place has been constructed in accordance with the plans and specifications submitted to and approved by the Maricopa County Environmental Services Department, Division of Water and Waste Management, Swimming Pool Construction Program. **In addition, I certify that I am familiar with all State and County Code requirements applicable to this project and that this bathing place was constructed in compliance with those Code requirements.**

Engineer, Architect, or Contractor:

Printed Name: _____
Engineer or Architect Registration # or Contractor License # (A9, A19, KA5, or KA6): _____
Company: _____
Address: _____
City: _____ State: _____ Zip: _____
Signature: _____ Phone: (_____) _____

Note: Signature by a contractor requires notarization below. Signature by a P.E. or R.A. requires seal below.

PE seal

State of _____)
County of _____) ss

Subscribed and sworn to (or affirmed) before me

this _____ day of _____, _____, by

Notary seal

name of signer (s)

signature of Notary Public

PLEASE DO NOT SEND BEFORE FINAL INSPECTION REQUESTED



SWIMMING POOL/SPA HYDRAULIC DESIGN GUIDELINES

TDH (skimmer pool with sand filter)

FEET FROM DRAIN:	1 – 25	26 – 50	51 – 75	76 – 100	101 – 125	126 – 150
TTL D/C HEAD (FT):	55	60	65	70	75	80

MAX FLOW RATES (PVC: C=140)

PIPE SIZE (IN):	1.25	1.5	2.0	2.5	3.0	4.0	6.0
PRESS SIDE (GPM):	25	60	90	120	220	350	800
SUCT SIDE (GPM):	15	35	50	80	120	220	450

MAX VELOCITIES

PRESSURE SIDE - 10ft/sec

SUCTION SIDE – 6 ft/sec

TURNOVER RATES

SPA – 30 MIN

SWIMMING POOL – 8 HRS

WADING POOL – 1 HR

NUMBER OF SKIMMERS REQUIRED

SPA, WADING POOL: 1 skimmer per 200 ft²

SWIMMING POOL: 1 skimmer per 400 ft² (min. of 2 skimmers)

3 OR MORE SKIMMERS REQUIRES A CLOSED LOOP

MINIMUM PIPE SIZES (BASED ON SKIMMER FLOW CONTROLLING)

	<u>main drain</u>	<u>skimmer</u>	<u>return</u>	<u>flow (gpm)</u>
2 skimmer	1.5"	2"	1.5"	54
3 skimmer	2"	2.5"	2"	81
4 skimmer	2.5"	3"	2.5"	108
5 skimmer	2.5"	3"	3"	135
6 skimmer	3"	4"	3"	162

NUMBER OF RETURNS (INLETS) REQUIRED

(SWIMMING POOLS – 6 MINIMUM ON CLOSED LOOP; SPA, WADING POOL – 1 PER 15 LF OF PERIPHERY; 3 OR MORE REQUIRES CLOSED LOOP)

PERIMETER:	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315
# RETURNS:	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

ALL PIPING MUST PASS A PRESSURE TEST @ 25 PSI FOR 30 MIN